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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,405	12/21/2001	Carsten Rosenow	3447	2969

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EXAMINER
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SIEW, JEFFREY

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/683,405

Applicant(s)

ROSENOW ET AL.

Examiner

Jeffrey Siew

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 18-30, 33, 34 and 41-66 is/are rejected.
- 7) ☒ Claim(s) 9, 12-17, 31, 32, 35-40, 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. On page 2 paragraph 7 the “???” is objected to because it is unclear as to its intended meaning. On page 19 paragraph 84 and page 30 paragraph 0129 the sentence is grammatically incorrect.

Status to referenced US applications require updating (e.g. see page 29 paragraph 0125)

### ***Claim Objections***

2. In claim 9 the term “second” is misspelled. In claim 51 “plurality” is misspelled.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 49-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- A) Claims 49-66 are indefinite because claim 49 depends on itself. It is unclear as to which claim it depends on. The metes and bounds of the claim cannot be determined.

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11,18-23,43-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Kacian (US5,364,763 Nov. 15, 1994).

Kacian et al teach a method of sample preparation comprising obtaining a sample comprising a first type of cells and second type of cell wherein the first type is at least 10 times more susceptible to lysis agent than second type (see whole doc. esp. col. 7 lines 45-50 where sodium deoxycholate is capable lysing white blood cells associated with mycobacteriu leaving the mycobacteria cellularly intact). After lysis , he separates all of the white blood cells from mycobacteria (see col. 11 line s 56-60).

While Kacian et al do not explicitly state a measure of susceptibility, the specification is also silent as to how such a “susceptibility” property is assayed. Nevertheless, Kacian states that the lysis agent sodium deoxycholate lyses all the white blood cells leaving the mycobacterium intact (see col. 9 lines 10-15). Consequently, Kacian et al’s teaching would meet the susceptibility limitation.

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***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 24-30,33,34,41,42, 48-54,57,58,65 & 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kacian (US5,364,763 Nov. 15, 1994) in view of Lockhart et al (US6,040,138 March 21, 2000).

The teachings of Kacian et al are described previously.

Kacian et al do not teach hybridizing to a plurality of different probes.

Lockhart et al teach performing hybridization assays using arrays with a multitude of different probes (see whole doc. esp. abstract). They teach concentrations of 5000 probes (see col. 3 line16).

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One of ordinary skill in the art would have been motivated to apply Kacian isolated DNA from mycobacterium to Lockhart et al's array in order to monitor the expression of genes. As Kacian state that their method was designed for preparation of DNA for hybridization assays, it would have been prima facie obvious to apply Lockhart et al's hybridization arrays to the DNA isolated from Kacian in order to monitor the many different gene expressions.

### SUMMARY

6. Claims 12-17, 31,32,35-40 are objected to for depending on rejected claim. Claims 55,56,59-64 are rejected under 112 second but are free of the prior art. Concerning claims 12-17,35-40,59-64, there is no prior art that teach the claimed method in which the first type of cell is animal and second type are plants cells or first type of cell is animal and second type are fungi or first type of cell is gram negative and second type are gram positive bacteria or first type of cell is yeast and second type are plant cells. Concerning claims 31,32,55 & 56 there is no prior art that teach or suggest the lysing method and assaying on bead or optical fiber with at least 5000 different probes.

### CONCLUSION

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Siew whose telephone number is (703) 305-3886 and whose e-mail address is Jeffrey.Siew@uspto.gov. However, the office cannot guarantee security through the e-mail system nor should official papers be transmitted through this route. The

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examiner is on flex-time schedule and can best be reached on weekdays from 6:30 a.m. to 3 p.m.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (703)-308-1119.

Any inquiry of a general nature, matching or filed papers or relating to the status of this application or proceeding should be directed to the Tracey Johnson for Art Unit 1637 whose telephone number is (703)-305-2982.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Center numbers for Group 1600 are Voice (703) 308-3290 and Before Final FAX (703) 872-9306 or After Final FAX (703) 30872-9307.

  
**JEFFREY SIEW**  
**PRIMARY EXAMINER**

May 17, 2003